(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
7 April 2005 (07.04.2005)

PCT

(10) International Publication Number
WO 2005/031704 A1

(51) International Patent Classification[7]: G10L 19/00

(21) International Application Number:
PCT/IB2004/051775

(22) International Filing Date:
16 September 2004 (16.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03103591.8 29 September 2003 (29.09.2003) EP

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:
— *with international search report*

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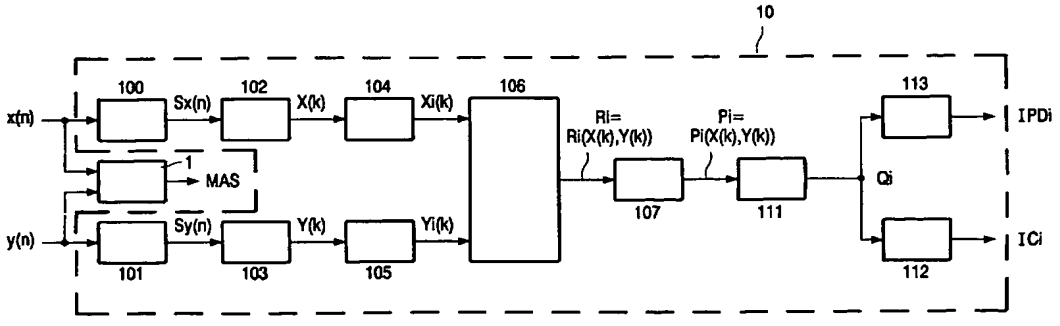
(54) Title: ENCODING AUDIO SIGNALS



(57) Abstract: The encoder transforms the audio signals (x(n),y(n)) from the time domain to audio signal (X(k),Y(k)) in the frequency domain, and determines the cross-correlation function (Ri, Pi) in the frequency domain. A complex coherence value (Qi) is calculated by summing the (complex) cross-correlation function values (Ri, Pi) in the frequency domain. The inter-channel phase difference (IPDi) is estimated by the argument of the complex coherence value (Qi), and the inter-channel coherence (ICi) is estimated by the absolute value of the complex coherence value (Qi). In the prior art a computational intensive Inverse Fast Fourier Transformation and search for the maximum value of the cross-correlation function (Ri; Pi) in the time domain are required.

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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